

WEST Search History

DATE: Monday, April 25, 2005

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L36	L34 and (portable or mobile)	59
<input type="checkbox"/>	L35	L34 and l17	0
<input type="checkbox"/>	L34	L32 and group	175
<input type="checkbox"/>	L33	L32 and l10	0
<input type="checkbox"/>	L32	20010201	251
<input type="checkbox"/>	L31	(chat or topic) near5 channel	625
<input type="checkbox"/>	L30	L29 and l10	4
<input type="checkbox"/>	L29	20010201	1624
<input type="checkbox"/>	L28	(chat or discussion) near5 channel	2692
<input type="checkbox"/>	L27	l25 and (discussion or chat)	4
<input type="checkbox"/>	L26	L25 and l10	0
<input type="checkbox"/>	L25	L19 and (topic or channel)	34
<input type="checkbox"/>	L24	L19 and topic	1
<input type="checkbox"/>	L23	L19 and l1	0
<input type="checkbox"/>	L22	L19 and l7	0
<input type="checkbox"/>	L21	L19 and l10	0
<input type="checkbox"/>	L20	L19 and l11	0
<input type="checkbox"/>	L19	20010201	90
<input type="checkbox"/>	L18	L17 and l11	3
<input type="checkbox"/>	L17	mobile communicator	255
<input type="checkbox"/>	L16	topic near8 (channel or frequency) near8 (user defined)	0
<input type="checkbox"/>	L15	l12 and group	1
<input type="checkbox"/>	L14	L13 and topic	0
<input type="checkbox"/>	L13	20010201	21
<input type="checkbox"/>	L12	L11 and l1	1
<input type="checkbox"/>	L11	transceiver same (channel selector) same (mobile or portable)	30
<input type="checkbox"/>	L10	transceiver same (channel selector)	189
<input type="checkbox"/>	L9	L8 NOT l6	12
<input type="checkbox"/>	L8	20010201	12
<input type="checkbox"/>	L7	channel same topic same (chat or discussion) same group	27
<input type="checkbox"/>	L6	channel near8 topic near8 (chat or discussion) near8 group	1

<input type="checkbox"/>	L5	L4 and (channel adj2 selector)	0
<input type="checkbox"/>	L4	L3 and channel and topic	44
<input type="checkbox"/>	L3	L2 and (portable or mobile)	356
<input type="checkbox"/>	L2	20010201	2304
<input type="checkbox"/>	L1	(chat or chatting or discussion or discuss) near5 group	4635

END OF SEARCH HISTORY

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L4: Entry 5 of 44

File: PGPB

Jun 20, 2002

DOCUMENT-IDENTIFIER: US 20020078154 A1
TITLE: WAP/IRC based instant collaboration tool

Application Filing Date:
20001219

Summary of Invention Paragraph:

[0004] The Internet has grown rapidly in recent years. The World Wide Web (WWW) has been widely embraced as a standard infrastructure over which a variety of applications can be deployed. A growing number of individuals are relying upon the WWW to perform daily activities. A similar revolution to that of the WWW is taking place within the domain of mobile telecommunications, with a burgeoning need for wireless Internet access, via the Wireless Application Protocol (WAP).

Summary of Invention Paragraph:

[0005] Chat Rooms and Instant Messaging have proved to be enormously popular Internet-based services. The predecessor to these services was the Internet Relay Chat (IRC), which is an IP-based service with support for distributed collaboration. Collaboration tools enable distributed users to work together using a variety of approaches. IRC provides a variety of mechanisms for users to collaborate across the WWW with friends, colleagues and others, both publicly and privately, by creating and subscribing to various "channels", or chat rooms, to exchange text messages and transfer files. As such, IRC has become the de facto standard for collaboration in this arena.

Summary of Invention Paragraph:

[0006] At the same time, the interest in wireless devices, for example, phones, pagers, and Personal Digital Assistants (PDAs), as well as wireless services, has expanded. The Short Message Service (SMS), a form of paging, was developed for these wireless devices. The SMS enables two mobile terminals to exchange text messages including alphanumeric combinations. The ability to exchange SMS messages provides the convenience of enhanced connectivity. Unfortunately, SMS has fundamental technical limitations that make it an unsuitable technology for providing collaborative services. These limitations include: unidirectional messaging; limited fixed length messaging (e.g., limited to 160 characters); and point-to-point messaging.

Summary of Invention Paragraph:

[0007] Wireless networks have led to the development of the "unplugged Internet". Supporting these developments is a new standard called the Wireless Application Protocol (WAP). WAP has emerged as a global standard for providing Internet communications and mobile telephony services on digital mobile phones, pagers, PDAs, and other wireless terminals. WAP is an open, global standard that empowers mobile users with wireless devices to access and interact with information and services. WAP technology is modeled on the WWW, but adapted for small devices with limited bandwidth and hardware capabilities.

Summary of Invention Paragraph:

[0010] Wireless Markup Language (WML) (also part of WAP), formerly called HDML

(Handheld Devices Markup Language), is a language that allows the text portions of a Web page to be presented on a mobile device with wireless access, for example, a cellular telephone or PDA. WML works on top of standard data link protocols, such as Global System for Mobile Communication, code-division multiple access, and Time Division Multiple Access.

Summary of Invention Paragraph:

[0011] Currently no system or method is known to exist for handling multi-client collaboration over wireless networks. Therefore, the need exists for a system and method for enabling two or more mobile users to synchronously collaborate and exchange messages using mobile devices.

Summary of Invention Paragraph:

[0015] In one embodiment of the present invention, a system for mobile collaboration is provided. The system includes a wireless application protocol client connected to a wireless application protocol gateway, a world wide web server hosting a wireless application protocol Chat service for managing collaborators on a session-per-user basis, the world wide web server connected to the wireless application protocol gateway, and an internet relay chat server specified by the wireless application protocol client at the start of the session.

Detail Description Paragraph:

[0029] According to an embodiment of the present invention, the user can start a chat group (also called a channel) or join an existing one. Also included is a protocol for discovering existing chat groups and their members. For example, the client system can create its own radius of peers through a ping/pong exchange of information including, for example, IP addresses, connection speed, and topics of interest.

Detail Description Paragraph:

[0034] The present invention introduces a system and method of chatting (or collaborating) using a wireless device. It enables two or more mobile users to exchange messages. The model is based on a client-server architecture: user messages are introduced on the terminal and sent back to the server that dispatches the messages to wireless recipient(s) via the WAP protocol. The model implements a set of methods that coordinate and manage the collaboration between the connected user community and/or individual subscribers.

Detail Description Paragraph:

[0036] This technology can be applied in a variety of scenarios. For example, mobile access to corporate intranets and extranets enables employees and business partners to access data in a cost and time efficient manner. This is true both in terms of generic applications, for example, e-mail, calendaring, as well as for access to industry-specific and shareable applications. In a mobile working scenario, a mobile worker can request a manager's help because of on-site problems. The manager at a home-office can start a co-browsing session to guide them through the process of initiating a synchronized WAP-Chat application (or co-browsing), for example, using manual instructions.

Detail Description Paragraph:

[0042] Market studies have shown a clear growth of demand for access to more information and services on mobile phones. However, most of the mobile data users currently use tools having limited functionality (such as SMS) compared to full Internet mobile services. The present invention exchanges instant messages (or to chat) on wireless platforms. The invention also presents a synchronized technique for collaborating in a seminar like model. The present invention has clear benefits for the general public, for entertainment, education, and business. In addition, tele-collaboration and conferencing between mobile professionals benefits consumers of wireless data.

CLAIMS:

8. A system for synchronous mobile collaboration comprising: a wireless application protocol client connected to a wireless application protocol gateway; a world wide web server hosting a wireless application protocol Chat service for managing collaborators on a session-per-user basis, the world wide web server connected to the wireless application protocol gateway; and an internet relay chat server specified by the wireless application protocol client at the start of the session.

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L4: Entry 9 of 44

File: USPT

Jul 20, 2004

DOCUMENT-IDENTIFIER: US 6766363 B1

TITLE: System and method of linking items in audio, visual, and printed media to related information stored on an electronic network using a mobile device

Abstract Text (1):

A system and method for enabling a user with a mobile device to link to information, on a local or global electronic network, related to an item of interest to the user while observing a visual, audio, or printed medium containing the item. Linking is accomplished by an item information provider creating codes that can be utilized by the user to implement a link between the user's device and an item information containing server programmed by the provider. The user can select the item by inputting codes to the device and be instantly linked to a database in the server on which item information is stored by the provider along with associated information to link to a network website specifically containing further item-related information for user access. If the user doesn't wish to access the information immediately, the mobile device may be used to "bookmark" or store the user's coded information request and the user may link to the server and retrieve the desired information when convenient.

Application Filing Date (1):

20000831

Brief Summary Text (3):

The present invention relates to a system and method for enabling a user to quickly search an electronic or computer network, such as the Internet, for information related to media items observed by and of interest to the user, and, more particularly, to a method and means by which a user can, using a mobile device, quickly link to electronic databases, located locally and/or on a global computer network, that contain information associated with items in audio, visual, and printed media observed by the user, which information is compiled by a provider connected with the media item of interest with content related thereto and accessible by suitable coding.

Brief Summary Text (5):

Global electronic and computer networks, such as the Internet, provide access to a tremendous amount of information relating to myriad topics and items such as various products, manufacturers, distributors, news, entertainment, and providers of services. It is difficult, however, for a user to investigate a particular item, e.g., a product, on a global computer network when the product is sold under more than one name, or when the user is not sure of the proper name of the product or its source. Similarly, the user may not know how to particularly identify an item that is seen or heard in a visual or audio medium or printed material in order to link to information of interest related to that item. It, therefore, can be quite a time-consuming and complex procedure to do an effective search on an item of interest, observed by a user, through all of the web sites and databases available that may contain pertinent information.

Brief Summary Text (6):

As the global computer networks, such as the Internet, are now capable of being

accessed by various mobile devices in addition to landline based devices, searches that are complex and time-consuming are a deterrent to the use of these devices for that purpose. These mobile devices include Internet telephones, Internet PDA'S, and various other such Internet portable devices. Many of the devices allow instant access to the Internet through wireless modems or other means, and some allow the collection of information and then the transfer of that information to landline based (desktop) computers for use when accessing the Internet. The PALM VII wireless PDA is an example of a current internet capable wireless device, the PALM III-V is an example of a current PDA that can transfer information for later internet access. Such mobile devices allow their users to have tremendous amounts of information available to them on a mobile basis. Services such as BarPoint, Yahoo, CNN, and the Weather Channel are all currently available on a variety of wireless devices. For example, the BarPoint service, which is at least partly described in the above-noted priority application, allows users to access information on products using their UPC numbers or to link to other information based on other machine readable symbologies or numerical codes. The Barpoint service uses an implementing server containing a database of product and manufacturer or provider identifying codes, e.g., UPC manufacturer codes, so that information relating to a particular product and its manufacturer, can be quickly obtained with the product's UPC. The entire UPC is input to the implementing server, which reads the manufacturer's code from the UPC and, using the UPC database therein, identifies the manufacturer. The server is programmed to then perform a search of the global computer network to locate sites relating to or operated by the manufacturer. Additionally, the server may search the global computer network on a product basis to locate other sites containing the UPC under search. To aid the server, and reduce search time, the user can identify the general category of the product (auto, book, music or movie cassette, food, hardware, software, etc.) when the UPC is entered.

Brief Summary Text (8):

While these known service systems enable a user to link to information related to products of interest which are being or have been observed, it will be seen that there is a need for a system that will enable the user to quickly link to information particularly related to specific items contained in various media content, including images and audio and printed materials transmitted or provided by some local medium such as video tape, mass digital storage devices, DVDs, CD-ROMS, movies, television, radio, books, catalogs, etc., during observation. Accordingly, a need is perceived for a user, while viewing an image, or hearing audio, or reading printed material, to be able to quickly relate a specific or exact part of the content of that image, audio, or printed matter to a particular site or sites on an electronic network, such as by linking to a site on the global computer network or Internet, particularly using a mobile device.

Brief Summary Text (11):

It is another object of the present invention to provide a system and method whereby a user can quickly and easily obtain a supply of available information about a specific item observed in an audio or visual or printed media, by linking to a local or global electronic or computer network with the use of a mobile device.

Brief Summary Text (12):

It is another object of the invention to provide a system and method for quickly and easily linking a mobile device to a local or global computer network to access information about an item being observed in any of an audio, visual, or printed media, the content of which information may be supplied by a provider of the item of interest.

Brief Summary Text (13):

It is a further object of the invention to provide an interactive system and method that enables a user with a mobile device to quickly search a local or global

electronic network and easily obtain a supply of information about the content of an item while observing audio works, visual images, and printed media, by linking to a database in a local or global computer network using codes that can be utilized by the information content provider, and the user requesting the link, to produce the link.

Brief Summary Text (15):

The present invention is directed to a system and method for achieving the above-mentioned objectives by enabling a user with a desktop computer or mobile device to link to information, on a local or global electronic network, e.g., the Internet, that is related to a content item of interest to the user while observing any of a visual, audio, or printed medium containing the item, which linking is accomplished by creating codes that can be utilized by both the information content provider and the user requesting the link to implement the link.

Brief Summary Text (16):

In one embodiment of the invention regarding an item in a visual medium, a user watching television in his home, where the source of the program may be a broadcast or a video tape or DVD, sees something of interest, such as an attractive actress or automobile, on which he would like to have more information. The user may take out his mobile device, press a button or enter keystrokes to select the item of interest and instantly he is linked to a server providing information made available on the actress stored by the producer on an internet website specifically for user access, or information is presented on the automobile that is stored by the manufacturer. Also, if the user does not wish to access this information while watching the program, the mobile device may be used to "bookmark" the user's request for information on the actress and automobile and any other observed item, or the user may simply record the request on paper, and the user may then link to the server, access and retrieve the desired information when the program ends or at any time in the future.

Brief Summary Text (17):

Regarding the linking operation, in the event, for example, that the user would like to receive information on a television commercial or event, he may input to the server: the category, i.e., television; his location, unless he wishes the server to assume that he is at his home based city which the server knows from the user's ID; the channel he is watching; and the approximate time and date of the commercial or event. The commercial may be marked with a marking icon or dot or other symbology so that the user knows that the information is available. The commercial content producer will have previously placed the content category/channel/time of broadcast, the date of broadcast/content/associated content link onto the server. The server may then resolve the user's request and provide the user the requested information. If several links occur near the user's reported time then the server may give the user a choice of several content sources. The user may then receive the requested content and be able to gain further access to additional content with additionally supplied global computer network links, and, if utilizing a mobile device, the user may also be able to transmit the content including associated links, to another computer, e.g., a home based computer, for later access.

Brief Summary Text (18):

Television viewing applications may also have extra utility with respect to commercials and home shopping as the user can request information on an item seen in a television commercial or a home shopping product, and then actually purchase the item on the spot by transmitting the purchase request from their computer or mobile device to the information site or other site as indicated.

Detailed Description Text (2):

The present invention involves a system and method to link to information, relating to an item being observed by a user in any of a visual, audio, or printed medium,

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L9: Entry 6 of 12

File: USPT

Feb 5, 2002

DOCUMENT-IDENTIFIER: US 6345290 B1

TITLE: Chat system displaying attribute information, number of statements or amount of statements in registered channel

Application Filing Date (1):19980924

CLAIMS:

2. The chat system according to claim 1, wherein the attribute information is one selected from the group consisting of a topic set by the channel, a channel mode set by the channel and a number of clients registering at the channel.

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L9: Entry 9 of 12

File: USPT

Jun 6, 2000

DOCUMENT-IDENTIFIER: US 6072521 A

**** See image for Certificate of Correction ****

TITLE: Hand held apparatus for simulating two way connectivity for one way data streams

Application Filing Date (1):
19980106

Detailed Description Text (28):

The addition of a two-way communication channel allows a consumer to also access online services. In such an embodiment, associated data may consist of references such as uniform resource locations ("URL") which are WWW page references. Associated data may include references to Internet News Groups which are shared static messages grouped by topic which may be accessed. Associated data may also include references to Internet Relay Chat areas which are multi-person dynamic conversation streams that enable users to communicate by text messages. Or, associated data may include pointers to information on an online service such as America Online, Prodigy or Compuserve. Thus, a menu may list several references. And by clicking on a reference, the system actually connects to and retrieves the referenced information from the appropriate source.

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L13: Entry 1 of 21

File: USPT

Feb 11, 2003

DOCUMENT-IDENTIFIER: US 6519472 B1
TITLE: Trunked radio monitoring system

Application Filing Date (1):
19990920

Brief Summary Text (4):

In conventional radio frequency communications systems, communication between two parties typically occurs over a preselected channel corresponding to a single operating frequency. For example, a conventional police radio communication system may include multiple mobile transceivers and a stationary central unit at a control site. Each mobile transceiver includes circuitry for transmitting and receiving over a single channel corresponding to a single operating frequency. Alternatively, each mobile transceiver may include a channel selector switch for selecting one of several channels, i.e., frequencies, for communication. However, each communication conventionally occurs over a single frequency.

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L13: Entry 2 of 21

File: USPT'

Sep 21, 1999

DOCUMENT-IDENTIFIER: US 5956648 A
TITLE: Trunked radio monitoring system

Application Filing Date (1):
19970312

Brief Summary Text (4):

In conventional radio frequency communications systems, communication between two parties typically occurs over a preselected channel corresponding to a single operating frequency. For example, a conventional police radio communication system may include multiple mobile transceivers and a stationary central unit at a control site. Each mobile transceiver includes circuitry for transmitting and receiving over a single channel corresponding to a single operating frequency. Alternatively, each mobile transceiver may include a channel selector switch for selecting one of several channels, i.e., frequencies, for communication. However, each communication conventionally occurs over a single frequency.

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L13: Entry 14 of 21

File: USPT

Mar 29, 1988

DOCUMENT-IDENTIFIER: US 4734928 A

TITLE: Cellular mobile phone with a plurality of accessing telephone numbers for allowing access to the mobile phones by any one of the telephones numbers

Application Filing Date (1):
19870318

Brief Summary Text (4):

Each mobile unit, which is comprised of a transmitter-receiver (commonly referred to as a transceiver), includes a call-channel selector which controls a frequency synthesizer to span the available call-channel frequencies and, in combination with a microprocessor, selects that call-channel which is received the strongest in order to select the cell closest to the mobile unit. Each mobile phone has its own unique telephone or use number by which it may be accessed by another mobile phone or land-based mobile phone. With presently known and used systems, each mobile phone is allowed only one such telephone number. This unique number is included on a ROM chip addressed by the microprocessor of the mobile unit. However, because only one user number is possible for each mobile unit, the owner of such mobile unit is restricted to only one mobile telephone service.

Detailed Description Text (2):

Referring now to the drawings in greater detail, and FIG. 1 in particular, for now, a block diagram of the essential components of a cellular mobile phone unit incorporating the adapter of the present invention is shown. The mobile unit is indicated generally by reference number 10, and includes a transceiver having a receiver 12 and transmitter 14 for communication with the cells of a cell-grid structure of a cellular mobile phone system. The receiver 12 receives radio signals from the individual cells which are then detected by a signal detector 16 for inputting into a microprocessor of the unit 18. Through the microprocessor 18 and receiver 12, the call-channel selector 20 will continuously receive the signals from the receiver 12 and select the strongest signal received, as controlled by the microprocessor 18. A frequency synthesizer 22 will lock in on that strongest signal, as controlled by the call-channel selector 20. The frequency synthesizer 22 will also determine the channel in which a transmitter will send out signals. Thus, both the receiver and transmitter will lock into the appropriate call channel of the cell that is closest to the mobile unit 10, and/or the strongest signal received by the mobile unit 10.

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L25: Entry 6 of 34

File: USPT

Nov 11, 2003

DOCUMENT-IDENTIFIER: US 6647270 B1

**** See image for Certificate of Correction ****

TITLE: Vehicletalk

Application Filing Date (1):

20000911

Brief Summary Text (5):

CB radio is a widely broadcast public medium where mobile users may talk to other mobile or stationary users in their vicinity. However, since there is no ability to prevent others from listening, there is no privacy between mobile communicators.

Detailed Description Text (6):

The RF transceiver 32 transmits and receives RF signals at a plurality of RF frequencies to one or more vehicles which include a vehicletalk mobile unit 16. Received signals are downloaded to baseband and forwarded to the microprocessor 40 for further processing. Transmitted signals are forwarded from the microprocessor 40 to the RF transceiver 32 for upconversion and transmission over one of the plurality of RF frequencies. The vehicle communication system 10 also provides for the option of transmitting a communication over currently licensed radio station channels, for example 105.9 FM. This can permit a vehicletalk operator to broadcast to non-vehicletalk operators. It also can provide a "scanning channel", such that non-vehicletalk operators can listen to broadcast vehicletalk communications.

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L36: Entry 2 of 59

File: PGPB

Jun 20, 2002

DOCUMENT-IDENTIFIER: US 20020078154 A1
TITLE: WAP/IRC based instant collaboration tool

Application Filing Date:
20001219

Summary of Invention Paragraph:

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Detail Description Paragraph:

[0037] Referring to FIG. 3, an illustrative example of a co-browsing environment will now be described. A server 304 is provided for client interaction. A client can include, for example, a user 302 or a moderator 306. The clients, upon entering a WAP room 308 and 310 the system and method determine whether a counterpart is in, e.g., whether a moderator is available for users. There can be multiple clients within each defined group. A page will be displayed at the clients either listing other clients currently in the WAP room 318 and 320 or displaying a message informing the client that no counterpart is currently in the WAP room 314 and 316.

Detail Description Paragraph:

[0038] The server 304 can set the privileges for the moderator 322, for example, a moderator's access to files stored on the server. The moderator works within these privileges, and can for example create and/or edit messages to other clients 324, the moderator can save draft messages 326, and determine when to send the messages to the user 328. The server receives the messages from the moderator and applies a set of user privileges to the messages 330, so that for example, the user cannot edit the message but only reply. The WML room page, including any messages sent to the server, is sent to all clients for display 332. The display as viewed by a client can also be dependent on client privileges. For example, a message drafted and sent by a moderator can be directed to a group of users defined by their privileges where another group is excluded from receiving the messages because their privileges limit the content received. This can be used in a situation where, for example, sensitive information is directed to a sub-group of management users among a larger group management and employees, each sub-group with privileges designed to safeguard the content of the information.

Detail Description Paragraph:

[0042] Market studies have shown a clear growth of demand for access to more information and services on mobile phones. However, most of the mobile data users currently use tools having limited functionality (such as SMS) compared to full Internet mobile services. The present invention exchanges instant messages (or to chat) on wireless platforms. The invention also presents a synchronized technique for collaborating in a seminar like model. The present invention has clear benefits for the general public, for entertainment, education, and business. In addition, tele-collaboration and conferencing between mobile professionals benefits consumers of wireless data.

CLAIMS:

8. A system for synchronous mobile collaboration comprising: a wireless application protocol client connected to a wireless application protocol gateway; a world wide web server hosting a wireless application protocol Chat service for managing collaborators on a session-per-user basis, the world wide web server connected to the wireless application protocol gateway; and an internet relay chat server specified by the wireless application protocol client at the start of the session.

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L36: Entry 8 of 59

File: USPT

Sep 21, 2004

DOCUMENT-IDENTIFIER: US 6795822 B1

TITLE: Text communication method and text communication system

Application Filing Date (1):
19991019

Brief Summary Text (6):

A channel is a virtual space shared by the plurality of chat clients. A nickname is identification information that specifies a user uniquely in a chat system.

Brief Summary Text (11):

Now that use of the internet and portable information devices increased rapidly, there are users who chat from a portable device while on a trip, from a desktop computer while at work, and from a home computer while at home. However, a keyboard of a portable device is not as easy to type as a keyboard of a desktop computer, because otherwise portable devices cannot be portable. Therefore, it is difficult to send and/or receive text messages using a portable device. The problem of typing is even greater with a chat because chatting requires a quick response.

Brief Summary Text (14):

Moreover, in some of these prior art methods, a user has to re-create a dictionary every time the user uses a different terminal. In other words, the user has to create a dictionary many times. Consequently, the user may end up having two or more different dictionaries. For example, the user may have one in a computer that he or she uses at work, and another in a portable computer that he or she uses while on trip. This can be even more inconvenient for the user.

Brief Summary Text (15):

A user generally wants to reduce the burden of typing to a different degree depending on the type of the terminal he or she uses. For instance, a user may want to use a shortcut function to obtain a long text by typing a shorter text when he or she is using a portable device because a portable device is difficult to type. However, the same user may not need such function when he or she is using a desktop terminal. There has been no technology that allows a user to adjust the degree of reducing the burden of typing depending on the device that the user uses.

Brief Summary Text (16):

Also, since a portable device has a smaller display area to display text messages than that of a desktop terminal, long text messages may not be fully displayed.

Brief Summary Text (28):

The communication devices send and receive text messages by connecting to the acting device. Examples of communication devices that can be used with the present invention include an information terminal that runs a chat client or a portable terminal such as a pager, which simply can send and receive text messages. When these communication devices send a connection message to connect to the acting device, they also send along therewith identification information such as its own IP address that the identification information identifies the communication device or the user. The identification information can also be sent during a regular

connection establishment process. The reporting means of the communication device reports to the acting device whether incoming and/or outgoing text messages should be converted based on a dictionary stored in the storing means.

Brief Summary Text (29):

The storing means of the acting device stores one or more dictionaries that correspond to at least one of the communication devices or a user. For instance, if a user A has a desktop information terminal and a portable terminal, the user A's dictionary can correspond to both these two terminals. Types of dictionaries are not limited to conventional ones such as Chinese character-Hiragana dictionary, and can be adjusted to meet user's needs.

Brief Summary Text (31):

This system of the present invention allows a user to use the same dictionary even when the user has more than one information terminals. The text communication system also allows a user to select a terminal to which text conversion should be applied. By adjusting the configuration of the dictionary, a user can selectively reduce the burden of typing. For instance, the configuration of the dictionary can be set to reduce the typing burden only when he or she is typing at a portable terminal or game terminal.

Detailed Description Text (6):

The chat server may be configured to administer a plurality of chat rooms or chat channels by directing communications in and out of each individual chat channels to and from the user terminals accessing each individual chat channel. Specifically, communications are segregated. Thus, only messages sent to a specific chat channel are allowed to be transmitted to user terminals logged on to that specific chat channel.

Detailed Description Text (7):

In the description below, each chat channel is an electronic conference room having an identifier such as a name or address, unique to that chat channel. As is described in greater detail below, when the invention is used in a group e-mail application, each user of an e-mail type electronic conference room is identified in a user list. For example, each user is identified by an e-mail address such that each user has his or her own unique e-mail address.

Detailed Description Text (8):

As shown in FIG. 1, the chat system includes user terminals engaged in a conversation with one another on a chat channel administered by the chat server. Only four user terminals are depicted in FIG. 1. However, it should be understood that any number of user terminals could participate in the chat channel, so long as each user terminal is authorized to participate in communications in the electronic conference room (chat channel or chat room). It should also be understood that the user terminals are, for instance, personal computers, portable computers, handheld game units, mobile phones, pagers, or similar devices with communications capability. The user terminal preferably includes a display or monitor, a storage means such as a hard drive, a central processing unit (CPU), memory such as RAM and a means for connecting to the network such as LAN card or a modem.

Detailed Description Text (11):

In this embodiment, a chat client runs on each user terminal. The user terminal herein can be any device that is able to receive and send text messages. Examples of user terminals include various information devices such as a personal computer, a portable computer, a handheld game unit, mobile phone and pager. At least some of the user terminals are connected to the chat server via the agent terminal. However, all of the user terminals do not need to be connected to the agent terminal. In an example shown in FIG. 1, two of the information or user terminals A1 and A2 that are used by user A are connected to the chat server via the agent terminal.

Detailed Description Text (30):

For example, let us suppose that user A has a user terminal A1 that is a desktop information terminal, and a user terminal A2 that is a portable device. The conversion modes of the user terminal A2 are set as "TEXTMODE IN ON" and "TEXTMODE OUT ON", such that the text message typed at the user terminal A2 as "*15*53*25" is converted as "Akashi-business trip-today" by the agent terminal and then sent to other appropriate information terminals.

Detailed Description Text (32):

In this way, user A can use the same dictionary even when the user terminals A1 and A2 are different types of portable devices. In other words, several user terminals can share the same dictionary even when the terminals have different architectures.

Detailed Description Text (74):

When a portable device is used as a user terminal, a determination key for the user terminal can be information that specifies a gateway device that connects the portable device to the internet.

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L36: Entry 9 of 59

File: USPT

Sep 7, 2004

DOCUMENT-IDENTIFIER: US 6788667 B1

TITLE: Wireless access to wired network audio services using mobile voice call

Abstract Text (1):

A system and method permits a wireless communication terminal (such as a mobile telephone) to access Internet audio services. The wireless terminal communicates in WAP protocol to a WTA Internet server acting as a gateway between a mobile network and a wired network, and requests a channel to an audio service residing on a particular Internet origin server. The WTA server initiates establishment of an audio channel with the origin server. The WTA server also instructs the wireless terminal to answer automatically the next voice telephone call it receives, and the WTA server instructs the mobile network to place a voice phone call to the wireless terminal. The wireless terminal automatically answers, and there is then established a speech path from the wireless terminal, over the mobile network, through the WTA server, to the origin server. The wireless terminal may access the Internet audio service over this audio path.

Application Filing Date (1):

20000620

Brief Summary Text (7):

Mobile wireless devices (such as mobile phones) which weigh less than a pound and which can fit in a pocket have become common in recent years, allowing much greater flexibility and mobility for voice communications than desktop or even notebook PC's.

Brief Summary Text (8):

It is convenient for users of mobile devices to have mobile access to Internet services to which they have become accustomed on their PC's. Wireless Application Protocol (WAP) has emerged as an open standard for accessing Internet services from wireless devices. The WAP solution includes an intermediate server, the WAP Gateway, which connects mobile devices to the Internet. WAP is designed for browsing content and handling data transfers in a way analogous to standard Internet technology. Current implementations of WAP are oriented primarily toward textual information. Characteristics of currently used underlying bearers don't allow real-time transmission of audio through the WAP protocol. It would thus be advantageous to provide a system and method for managing audio data flow between an Internet VoIP-based audio server and a user's wireless device.

Brief Summary Text (10):

An object of the present invention is to provide a method of managing audio data flow between an Internet VoIP-based audio server and a user's wireless terminal supporting the WAP standard. The invention relies on the Wireless Telephony Application (WTA) specification which is part of the WAP standard. WTA extends WAP with an interface to mobile network telephony services, making it possible to use a voice phone call as an audio path between a user's terminal and an Internet audio server.

Drawing Description Text (5):

FIG. 2. (prior art) is a programming model of an Internet connection in which a user at a mobile terminal obtains textual content from a server;

Drawing Description Text (6):

FIG. 3 is a programming model of a mobile terminal engaged in an Internet voice chat according to the present invention;

Drawing Description Text (7):

FIG. 4A illustrates control and data flow for engaging a mobile terminal in an Internet voice chat according to the present invention;

Drawing Description Text (8):

FIG. 4B illustrates control and data flow for disengaging a mobile terminal from an Internet voice chat according to the present invention; and

Drawing Description Text (9):

FIGS. 5a through 5i depict the displays appearing on a mobile terminal while a user enters, participates in, and leaves a voice chat according to the present invention.

Detailed Description Text (6):

Although mobile telephones were developed to provide subscribers with voice telephone capability over the public switched telephone network (PSTN), mobile telephones have in recent years come to be equipped with small display screens for receiving short text messages, such as from the short message service (SMS), or email from the Internet. Wireless application protocol (WAP) has been developed for interfacing mobile telephones with the Internet.

Detailed Description Text (7):

The programming model for a mobile telephone thus interfaced to the Internet is given in FIG. 2. The primary role of client mobile telephone 200 is to communicate in voice through the PSTN (not shown). Through the PSTN, client mobile telephone 200 may communicate via WAP with gateway 210 of Internet 100. Gateway 210, in turn, communicates via IP with an origin server 120 of Internet 100. Server 120 may be, for example, a text chat server or an email server, either of which provides textual content to be forwarded through gateway 210 to client 200.

Detailed Description Text (8):

It is generally not feasible to use the programming model of FIG. 2 for enabling client 200 to participate in voice chats, because WAP evolved to incorporate mobile voice telephones into the sort of programming model given in FIG. 1A for textual data transfers. The effectiveness of WAP depends on the characteristics of the underlying bearer, and currently used bearers are not suitable for real-time audio data transmission via WAP protocols.

Detailed Description Text (9):

In accordance with the present invention, a voice chat is implemented via WAP by exploiting a normal voice phone call as a speech path between a user's mobile device and an Internet voice chat server. The WAP environment includes the Wireless Telephony Application (WTA) framework which the present invention adapts to extend voice chat to a mobile user.

Detailed Description Text (10):

A programming model of voice chat according to the present invention is given in FIG. 3. The generalized gateway 210 depicted in FIG. 2 is in particular a WTA server 210A in FIG. 3. WTA server 210A communicates with a client mobile device 200 through WAP, and also through voice telephone calls via the mobile telephone network portion of the PSTN (not shown).

Detailed Description Text (11):

FIG. 4A shows flow of data and control that occurs when a mobile client 200 participates in an Internet voice chat according to the present invention. In Block 402, a user of mobile client 200 connected to gateway 210 via WAP uses a microbrowser (known in the prior art and not shown) to select a voice chat service Uniform Resource Locator (URL). Client 200 sends a Wireless Session Protocol (WSP) Get request (known in the prior art) to WTA server 210A. The selected URL is the argument of the WSP Get request. In Block 404, the WTA server 210A connects to the voice chat server 120, and requests a list of available chat rooms and chat participants. In Block 406, chat server 120 sends to WTA server 210A the list that WTA server 210A requested in block 404. In Block 408, WTA server 210A forms the list of chat rooms and participants into voice chat service content, and returns it to client 200. In Block 410, voice chat content is presented by client 200 to the user, who selects a chat room. From the user's request, client 200 forms another WSP Get request, which requests a "deck" specifying the selected chat room. Decks are known to those in the art; a deck is a group of one or more "cards"; a card is a single unit of Wireless Markup Language (WML) navigation or user interface. The deck is identified by a uniform resource locator (URL).

Detailed Description Text (12):

In Block 412A, WTA server 210A receives the Get request, and returns the requested deck. It contains but a single card, which instructs client 200 to bind the incoming call event (cc/ic) so that an ensuing call will be answered automatically (block 418). In Block 412B, WTA server 210A requests chat server 120 to set up chat channel with WTA server 210A. In Block 412C, WTA server 210A requests mobile network 480 to place a voice call to client 200. In Block 418, in response to the Get request received in block 412A, client 200 binds the incoming call event cc/ic to automatically answer an ensuing voice call. In Block 420, in response to the request received from block 412C, chat server 120 sets up a chat channel with WTA server 210A. This will be part of the overall speech path to be discussed in connection with block 428. In Block 422, mobile network 480, as instructed in WTA server 210 in block 412C, places a voice call to client 200. In Block 424, client 200, having its cc/ic bound as discussed above to answer an incoming call automatically, answers the incoming voice call. In Block 426, mobile network 480 informs WTA server 210A that client 200 has answered the call. In Block 428, a two-way speech path is now established from client 200 via a voice call path through mobile network 480 to WTA server 210A and a chat channel from WTA server 210A to chat server 120. A user of client 200 engages in an Internet voice chat.

Detailed Description Text (13):

Termination of the Internet voice chat is discussed in FIG. 4B. In Block 430, the user of client 200 places the phone in an on-hook condition. In Block 432, mobile network 480 informs WTA server 210A that the user has hung up. Mobile network 480 is no longer carrying the portion of the speech path it carried in block 428. In Block 434, WTA server 210A disconnects the chat channel it had with chat server 120. None of the speech path that existed in block 428 still exists.

Detailed Description Text (18):

Although the described embodiment relates to WAP standard, it is to be understood that the method is applicable in the context of any other solution for wireless access to wired networks, which would combine the ability to browse network content with the ability to arrange mobile voice calls from network sites.

CLAIMS:

1. A method of wireless access to a wired-network-based audio service from a wireless terminal, comprising the steps of: (a) sending, from the wireless terminal in a wireless network to a network gateway server, a request identifying an audio service residing on an origin server in a wired network; (b) sending, from the network gateway server to the origin server, a request for an audio channel to the audio service; (c) setting up in the origin server the requested audio channel

between the origin server and the network gateway server in the wired network; (d) sending, from the network gateway server to a mobile network, an instruction to place a mobile voice call in the wireless network between the wireless terminal and the network gateway server; (e) sending notification from the mobile network that the wireless terminal has answered the voice call; and (f) performing, in the network gateway server, digital conversion of audio data flow formats between the mobile voice call in the wireless network and the audio channel in the wired network, wherein a speech path is established from the wireless terminal through the mobile voice call to the network gateway server and from the network gateway server through the audio channel to the audio service on the origin server over which audio transmission may take place.

11. Apparatus for wireless access to a wired-network-based audio service from a wireless terminal, comprising: a network gateway server; an origin server in a wired network; means for sending, from the wireless terminal in a wireless network to the network gateway server, a request identifying an audio service residing on the origin server; means for sending, from the network gateway server to the origin server, a request for an audio channel to the audio service; audio communication means in the origin server for providing the requested audio channel between the origin server and the network gateway server in the wired network; means for sending, from the network gateway server to a mobile network, an instruction to place a mobile voice call in the wireless network between the wireless terminal and the network gateway server; means in the mobile network for providing notification that the wireless terminal has answered the voice call; and conversion means in the network gateway server for performing digital conversion of audio data flow formats between the mobile voice call in the wireless network and the audio channel in the wired network, wherein a speech path is established from the wireless terminal through the mobile voice call to the network gateway server and from the network gateway server through the audio channel to the audio service on the origin server over which audio transmission may take place.

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L36: Entry 18 of 59

File: USPT

Jan 13, 2004

DOCUMENT-IDENTIFIER: US 6678720 B1

TITLE: Chat system and method for delivering additional information via another independent network

Application Filing Date (1):

20000410

Brief Summary Text (10):

Considering an example wherein a certain user at the destination of a business trip wants to contact all members of a group, if it is possible to connect to a chat system, the user can directly convey informational matter to all members of the group by connecting to the chat system and dispatching the matter to the virtual space for the relevant group. However, if it is not possible to connect to a chat system, directly conveying the matter to all of the members is difficult.

Brief Summary Text (11):

Presently, the following methods are conceivable in the case wherein it is desired to convey the same matter to a plurality of members: (A) The user telephones from his destination to his usual location, and requests the person who takes the call to dispatch a message to the channel on his behalf. (B) The user leaves a message using by dialing a predetermined telephone number and recording a message, and has those persons belonging to the same department periodically access the service. (C) The user uses the short message function of a portable telephone to send a message via a mailing list, which can simultaneously distribute electronic mail to numerous persons.

Brief Summary Text (30):

Furthermore, the data received from the first information terminal and then stored is not limited to voice data. For example, if the first information terminal is a fax machine, the messaging device receives image data from the first information terminal and stores it on the Web page. In addition, if the first information terminal is a portable information terminal that does not have a chat device, the messaging device receives text data and stores it on the Web page. In this case, for example, although the first information terminal does not have an IRC client, it can send and receive electronic mail.

Brief Summary Text (45):

First, the recorded message monitoring means searches the message table for messages addressed to "USER-A" and messages addressed to channel #CH1. In this case, messages whose send source is "USER-A" are excluded. If a message addressed to "USER-A" is found as a result of the search, the recorded message monitoring means notifies the recorded message notification means of the storage location of the message. The recorded message notification means retrieves, for example, voice data from the storage location and sends it to the telephone set of "USER-A." Thereby, the data sent to a user by another user can be acquired outside of the chat system. In addition, the data from another user to a designated channel can be obtained outside of the chat system.

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L36: Entry 34 of 59

File: USPT

Feb 5, 2002

DOCUMENT-IDENTIFIER: US 6345290 B1

TITLE: Chat system displaying attribute information, number of statements or amount of statements in registered channel

Abstract Text (1):

When actuation of an application program is received by a client, the client is connected with a chat server and participates in and registers at a channel, and attribute information, a number of times of statements or amount of statements in the registered channel is displayed, without a user's predetermined operation and a publicly known conversation process is executed. Thereafter, when designation of the displayed attribute information, number of times of statements or amount of statements is received, a channel where statements are possible is changed into a channel relating to the designation.

Application Filing Date (1):

19980924

Brief Summary Text (2):

The present invention relates to a chat system for realizing conversation using characters, more specifically relates to a chat system having characteristics in display of attribute information of channels and a procedure for changing the channels, a chat server, a client and a computer memory product.

Brief Summary Text (5):

One embodiment of the chat system is such that one chat server is used and a plurality of channels are used. The channel represents an imaginary discourse room, and statements of another users in the discourse room can be received. A state such that the statements can be transmitted to other users is called "participations". Namely, users can join in the conversation in the channel by permitting the users to participate in the channel.

Brief Summary Text (6):

In the chat server, a statement received in a channel is transmitted only to other users participating in the channel, and thus the statement cannot be received by users participating in other channels, so independence between channels is secured.

Brief Summary Text (8):

Attribute information such as a number of clients participating in each channel, a set topic and channel mode is given to the users who accessed to the chat server. The channel mode includes a secret mode which conceals existence of the channel from the users who don't participate in the channel, an invite only mode which permits only users who invited by the users participating in the channel to participate in the channel, and a channel key mode which permits only users who input a set password to participate in the channel.

Brief Summary Text (13):

More specifically, the chat system of the senior application displays conversation in a channel to which a user who operates a client pays attention, more

specifically in the channel in which the user participates, and conversation in a channel at which the user registers on different areas of a display screen. Moreover, this chat system provides statement means in the channel in which the user participates. Furthermore, when the statement displayed on the display screen in the channel at which the user registers is designated by using a pointing device or the like, this chat system changes the channel in which statement is possible and permits the user to participate in the channel where the statement is made.

Brief Summary Text (14):

Therefore, a user who uses the chat system of the senior application views conversation contents in the registered channel sideways and at the same time can enjoy conversation in the participation channel. Further, in the case where the user finds statements relating to an interesting topic in the registered channel, the user designates the statements using the pointing device so as to change easily the channel in which statement is possible into the channel in which the person who is making the statement participates, and thus the user can join in the conversation.

Brief Summary Text (15):

In addition, the aforementioned chat system is arranged so that every time attribute information of each channel at which the user registers, namely, information such as a number of clients registering in the channel, a set topic and a channel mode is changed, the information is transmitted from the chat server to the client which is operated by the user.

Brief Summary Text (17):

The attribute information of the each channel, namely, information such as a number of clients registering in the channel, a set topic and a channel mode is changed as the topic changes and also as the time proceeds, but in the chat system of the senior application, predetermined operations should be performed every time the information is displayed, so an improvement in convenience of usage has been desired.

Brief Summary Text (18):

In addition, when characters are used for displaying the attribute information in the each channel, for example, topics, it is necessary to read characters which are displayed for making a distinction between topics, so conversation is interrupted during a period required for the reading.

Brief Summary Text (23):

In the present invention from the first aspect, a name of channel which is permitted to be registered and its attribute information are displayed on each client. Therefore, since the attribute information of the channel permitted to be registered which is changed as the time proceeds is displayed, a user can know a change in the attribute information of the channel permitted to be registered without performing a special operation. Here, examples of the attribute information are a topic of the channel permitted to be registered, a channel mode of the channel permitted to be registered or a number of clients of the channel permitted to be registered, and the user can know their changes easily.

Detailed Description Text (6):

FIG. 3 is a flow chart showing a series of processing procedure in the chat system according to the present invention. When actuation of an application program of the present invention is received, connection with a chat server and participation and registration in a channel are made by an access process, mentioned later (S1). Then, attribute information, a number of times of statements or amount of statements in a channel at which a user operating a client registers is transmitted from the chat server to the client by a display process, mentioned later, so as to be displayed (S2). Moreover, publicly known conversation process for controlling transmission and receiving of statements is performed (S3).

Detailed Description Text (10):

FIG. 5 is a flow chart showing a procedure for transmitting the attribute information (S2 in FIG. 3). When the participation in and registration at the channel of the client based on the aforementioned access procedure is completed, the chat server acquires the attribute information of the channels at which the respective clients register and transmits the attribute information to corresponding clients (S11).

Detailed Description Text (11):

Next, a judgment is made as to whether or not the access state of each client to the chat server is continued (S12). When the judgment is made that the access state is continued, a judgment is made as to whether or not an event (for example, setting of topics, changing of a channel mode, new participation, etc.) relating to the change in the attribute information by means of operation by users participating in the channel is received (S13). When the event is received, the attribute information of the channel is acquired to be transmitted (S14). When the judgment is made at S12 that the access is not continued, the processing procedure is terminated. When the judgment is made at S13 that the event is not received, the procedure returns to S12, the processes thereafter are repeated.

Detailed Description Text (12):

FIG. 6 is an explanatory drawing showing one example of a display screen of the client. An area in the lower right portion in the drawing is a window W1 on which names and attribute information of channels are displayed. The window W1 is provided with, in order from left, an icon area W1a on which icons representing channel modes are displayed, a channel name area W1b on which names of channels are displayed, a number of users area W1c on which a number of clients registering at a channel is displayed, a topic area W1d on which topics are displayed, and a mode area W1e on which channel modes are displayed.

Detailed Description Text (18):

FIG. 9 is a flow chart showing a procedure (S4 in FIG. 3) for changing a channel. When an event is received, a judgment is made as to whether or not the event is an event for designating a registered channel displayed on the display screen (S31). When the judgment is made that the received event is such an event, a request to change the channel is transmitted to the chat server so that the channel is replaced with a channel where statements are possible (S32). Then, the process for changing the channel is terminated and the procedure is returned to the source of the access. When the judgment is made at S31 that the received event is not the event for designating another channel, another event process, for example, a judgment is made as to whether or not the received event is an event for commanding to terminate the processing procedure of the chat system (S33), and the procedure is returned to the source of access.

Detailed Description Text (19):

FIG. 10 is a block diagram showing an arrangement of a computer memory product according to embodiment of the present invention. A program exemplified here includes a step of accessing to the chat server so as to register at a plurality of channels, a step of transmitting a statement inputted by user operating computer which executes the program, a step of receiving attribute information of the channel at which the user registers, a step of displaying the received attribute information on a predetermined area, and a step of when designation of the displayed channel is received, changing the channel into a channel where statements are possible. This program is recorded in a computer memory product, mentioned later.

Detailed Description Text (22):

A computer memory product 13, which is charged in a disk drive 10a provided in the computer 10, is composed of a portable magneto-optical disk, CD-ROM, flexible disk

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L36: Entry 44 of 59

File: USPT

Apr 10, 2001

DOCUMENT-IDENTIFIER: US 6215877 B1

TITLE: Key management server, chat system terminal unit, chat system and recording medium

Application Filing Date (1):
19980923

Brief Summary Text (3):

FIG. 1 is a diagram for explaining the principle of a conventional chat system. In this chat system, communication channels A to C (51 to 53) are opened on a chat server 50 connected to a computer network. The user connects the chat server 50 by chat clients (terminal units) 60 to 69 and thus selectively connects the channels A to C (51 to 53). As a result, the communication using a character or the like can be accomplished between users connected to the same channel. Generally, the information transmitted from a user is distributed to all the users connected to the same channel. Also, even on a channel connected with three or more users, one-to-one communication between users is possible.

Brief Summary Text (4):

FIG. 2 is a block diagram showing a configuration example of the essential parts of the conventional chat system. In this chat system, first, an input unit 14 of a chat client 5 receives an input signal from a keyboard (not shown). In FIG. 2, only a single chat client 5 is shown as a representative. An input signal received by the input unit 14 is transmitted by a transmission section 16 to a channel X(4) which, in the chat server 2 is selected by a channel selection section 10. A signal arriving from other chat clients through the channel X(4) in the chat server 2 is received by a receiving section 17. The signal received by the receiving section 17 is output by an output unit 19 to and is displayed on a display screen (not shown).

Brief Summary Text (6):

A method suggested for preventing the eavesdropping is to encrypt the communication text using a secret key prepared by a chat server. FIG. 3 is a block diagram showing an example configuration of the essential parts of a conventional chat system with the communication text encrypted. The chat server 7 of the chat system includes a channel secret key generation section 34, an encryption section 33, a channel secret key request receiving section 31 and a channel secret key distribution section 32. The channel secret key generation section 34 generates a channel secret key unique to each channel for encrypting/decrypting the communication data exchanged through a channel in the server 7 managed by the server 7. The encryption section 33 encrypts the channel secret key generated by the channel secret key generation section 34. The channel secret key request receiving section 31 receives a distribution request of the channel secret key unique to the channel X(4) from a chat client 6 through the channel X(4). When the channel secret key request receiving section 31 receives the distribution request, the channel secret key distribution section 32 distributes the channel secret key unique to the channel X(4) encrypted by the encryption section 33 to the chat client 6 through the channel X(4). In FIG. 3, only one chat client 6 is shown to represent all chat clients.

Brief Summary Text (7):

The chat client 6 of the chat system includes a channel selection section 10 for selecting a connected channel, a channel secret key request section 11 for requesting a channel secret key unique to the channel X(4) through the channel X(4) selected by the channel selection section 10, a channel secret key receiving section 12 for receiving the channel secret key requested by the channel secret key request section 11, a channel secret key decryption section 13 for decrypting the channel secret key received by the channel secret key receiving section 12, and an input unit 14 for receiving the input signal from a keyboard (not shown).

Brief Summary Text (10):

The chat client 6 selects the connected channel at the channel selector 10, and the channel secret key request section 11 requests the chat server 7 for a channel secret key unique to the channel X(4) through the channel X(4) selected by the channel secret key request section 11. The chat server 7 accepts the request at the channel secret key request receiving section 31 and distributes the encrypted channel secret key unique to the channel X(4) to the chat client 6 through the channel X(4).

Brief Summary Text (11):

The chat client 6 receives the requested channel secret key unique to the channel X(4) at the channel secret key receiving section 12, and decrypts the received channel secret key at the channel secret key decryption section 13. The chat client 6 encrypts/decrypts the signal transmitted/received to and from the channel X(4) at the encryption section 15/decryption section 18 using the decrypted channel secret key.

Brief Summary Text (15):

According to the present invention, there is provided a key management server comprising means for generating a channel secret key unique to each channel for encrypting/decrypting the communication data exchanged through a plurality of channels managed by one or more chat servers, means for encrypting the channel secret key generated by the channel secret key generation means, means for receiving the distribution request of the channel secret key unique to a channel through the channel managed by the chat server from a second terminal unit, and means for distributing the channel secret key unique to the channel encrypted by the encryption means to the second terminal unit through the same channel.

Brief Summary Text (16):

In view of the fact that like the chat client, the key management server constituting a terminal unit as viewed from the chat server generates a channel secret key unique to each channel, the communication can be kept secret even when a chat server low in reliability is used.

Brief Summary Text (17):

Also, in the key management server according to this invention, the channel secret key generation means generates the channel secret key unique to each of the groups which is divided so as to include a plurality of terminal units in the channel, and the receiving means receives the distribution request for the channel secret key for each group from the second terminal unit.

Brief Summary Text (18):

Therefore, the communication can be kept secret for each group in the same channel.

Brief Summary Text (21):

Further, the public key acquisition means acquires the public key when the second terminal unit is connected to the channel managed by the chat server.

Brief Summary Text (23):

Further, in the key management server according to this invention, the public key acquisition means acquires the public key from the second terminal unit and registers the public key and the user name thereof when connected to the channel managed by the chat server.

Brief Summary Text (35):

Furthermore, the key management server according to the invention comprises second receiving means for receiving the public key distribution request from the remote user of the second terminal unit through the channel managed by the chat server and second distribution means for distributing the public key acquired by the public key acquisition means to the second terminal unit when the second receiving means accepts the distribution request.

Brief Summary Text (37):

Also, the chat system terminal unit according to the invention includes means for generating a session key for encrypting/decrypting the communication data at the time of one-to-one communication in the channel managed by the chat server, means for requesting the public key to the key management server for distributing the public key to the remote user through the channel managed by the chat server, means for receiving the public key requested for by the public key requesting means, encryption means for encrypting the session key generated by the session key generation means using the public key received by the receiving means, and means for distributing the session key encrypted by the encryption means to the terminal unit of the remote user through the channel.

Brief Summary Text (39):

Further, the chat system terminal unit according to the invention comprises means for encrypting the communication data using the channel secret key unique to each channel distributed from the key management server for encrypting/decrypting the communication data exchanged through each of a plurality of channels managed by one or more chat servers, means for outputting the communication data encrypted by the encryption means in addition to the information identifying the encryption to the channel managed by the chat server, and means for decrypting the communication data by the channel secret key when the information identifying the encryption is added to the communication data received from the channel.

Brief Summary Text (43):

Furthermore, a computer memory product according the invention comprises first computer readable program code means for causing a computer to generate a channel secret key unique to each channel for encrypting/decrypting the communication data exchanged through the channel managed by one or more chat servers, second computer readable program code means for causing the computer to receive a distribution request for the channel secret key unique to each channel from one terminal unit through the channel managed by the chat server, and third computer readable program code means for causing the computer to distribute the channel secret key unique to the channel generated by the first computer program code means through the channel to the terminal unit when the second computer program code means receives the distribution request.

Detailed Description Text (3):

FIG. 4 is a diagram for explaining the principle of a chat system according to this invention. In this chat system, communication channels A to C (55 to 57) are opened on a chat server 54 connected to a computer network. The user connects to the chat server 54 by chat clients (terminal units) 60 to 63, 65 to 69, and selectively connects to the channels A to C (51 to 53). The channel secret key unique to each of the channels A to C is generated by a key management server 64a constituting a client (terminal unit) equivalent to the chat clients 60 to 63, 65 to 69. In response to a distribution request from the chat clients 60 to 63, 65 to 69, the channel secret keys unique to the channels A to C connected with the chat clients

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L36: Entry 50 of 59

File: USPT

Jun 27, 2000

DOCUMENT-IDENTIFIER: US 6081830 A

TITLE: Automatic linking to program-specific computer chat rooms

Application Filing Date (1):
19971009

Detailed Description Text (4):

With respect to computer system 7, computer 10 is coupled to a monitor 12, a pointing device 14, and a keyboard 16. Computer 10 includes a processor (preferably, an Intel Pentium processor), random-access memory (preferably, at least sixteen megabytes), read-only memory (ROM), and one or more storage devices, such as a hard disk drive, a floppy disk drive, an optical disk drive, and a tape cartridge drive. The invention is not particularly limited to a given type of computer 10. A given computer 10 is preferably a PC-compatible computer such as those manufactured and available from Gateway 2000, Inc., of North Sioux City, S.Dak., and running a version of the Microsoft Windows operating system. The construction and operation of such computers are known within the art. Computer 10 may be either a portable or a desktop computer, as well.

Detailed Description Text (8):

Computer 10 of computer system 7 also includes an internal clock set to the local date and time in which the computer 10 is operating, as well as an electronic program guide (EPG). An electronic program guide is a database of guide information containing information related to the television programs viewable on the channels of the tuner (such as that within television 18, as obtaining the channels from a source such as cable television, etc.). Such electronic program guides are known within the art, and typically provided by a program guide provider. For example, Harman Interactive Group, manufactures and sells an EPG product that enables a computer user to receive weekly cable television program listing customized for a particular cable company direct to the user's computer. The program in this example is received over a direct-dial server. The invention is not so limited, however. Electronic program guides are also amenable to direct download, via satellite, or over the Internet from a different provider. Furthermore, such guides are amenable to transmission in-band or out-of-band with the television signals from a source such as cable or satellite television, as known within the art. The transmission within the vertical blanking interval (VBI) is particularly known within the art. The invention is not so limited, however.

Detailed Description Text (12):

Server 20 also has a database mapping each unique identification code with the program with which it corresponds. When server 20 receives identification code information from computer 10, it is therefore able to determine which program is on the channel switched to on a corresponding tuner of computer 10. Server 20 then links computer 10 to a chat room specific to that program. That is, the computer user of computer 10 is able to chat with other computer users who have their tuners switched to channels showing the same program. When a computer user switches the corresponding tuner to a different station, server 20 links computer 10 to a different chat room, specific to the newly tuned-in program.

CLAIMS:

1. A computerized chat system comprising:

a central chat server maintaining a plurality of program-specific chat rooms;

at least one tuner, each tuner capable of switching among a plurality of channels, each channel receptive to a plurality of programs;

at least one computer, each computer having a program guide including an identification code for each program of each channel of a corresponding tuner,

wherein each computer detects the channel switched to on the corresponding tuner and sends the code of the program currently on the channel to the Server, the server linking the computer to the chat room for the program corresponding to the code, automatically without any user intervention.

2. The computerized chat system of claim 1, wherein each channel is a television channel, and each program is a television program.

3. The computerized chat system of claim 1, wherein each tuner is selected from the group of tuners consisting of: a cable television tuner, a broadcast over-the-air television tuner, and a satellite television tuner.

10. A computer for a computerized chat system comprising:

a memory storing a program guide including an identification code for each of a plurality of programs of each of a plurality of channels of a corresponding tuner,

means for detecting a channel to which the corresponding tuner is switched;

means for obtaining the identification code; and,

means for sending the identification code of the program currently on the channel switched to on the corresponding tuner to a chat server, automatically without any user intervention.

12. The computer of claim 10, further comprising a modem through which the computer sends the identification code of the program currently on the channel switched to on the corresponding tuner to the chat server.

13. The computer of claim 10, further comprising an Internet connection, the computer sending the identification code of the program currently on the channel switched to on the corresponding tuner to the chat server over the Internet.

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L36: Entry 53 of 59

File: USPT

Dec 28, 1999

DOCUMENT-IDENTIFIER: US 6009458 A

TITLE: Networked computer game system with persistent playing objects

Application Filing Date (1):
19960509

Detailed Description Text (35):

A "session" is a period during which a game is played up to a pause or conclusion. As an example, a group of players may play for several hours, take a break, and resume the next day. In this case they have played two "sessions" of a single "instantiation".

Detailed Description Text (72):

Our mapping algorithm mapped the mobility in the chess game to the ability to traverse certain types of terrain. A "mobile" piece such as the phlier, can move in any direction on the chess board, and cross most terrains in the risk game. In this manner we attempt to preserve some sort of intuitive notion of the behavior of a given playing object across games. Obviously, for some games this might be difficult to do.

Detailed Description Text (82):

FIG. 5 illustrates the format in one embodiment where a database facility maintains the association of playing objects with individual users. Specifically, a table 502 contains a column of user Ids in correspondence with a column of pointers to respective lists of playing objects which are associated with each user ID. It will be appreciated that while the system associates playing objects with individual users, it does so only by user ID number; the "user", as the term is used herein, can in actuality comprise a group of users which are represented in the database facility by a single user ID.

Detailed Description Text (161):

FIG. 10 is a block diagram of the software architecture of the server 102. It comprises a user interface facility 402, a database facility 404, a marketplace facility 406, and a gaming facility 408. A financial processing facility may also be included. The user interface facility 402 connects to the network 104, and provides the environment in which a user initially finds him or herself upon connecting to the server 102. The user interface facility 402 provides a number of services to users, one of which is to allow different users to rendezvous with each other, choosing teams or opponents, and selecting a game to play (if the server 102 supports more than one game). Once a game and a group of players are selected, the user interface facility 402 communicates this information to the gaming facility 408, which conducts the specified game among the specified users.

Detailed Description Text (223):

While a group of users are playing a game, the public game flow control traffic from the game facility to the clients may be directed through the user interface facility 402 via a communications channel which is similar to an Internet Relay Chat (IRC) channel. In this way, observers can join the channel to watch the traffic. Player chat traffic may be directed through a second IRC-like channel,

which the user interface facility 402 could repeat on the first channel so that observers can see the player chat, but not vice versa. Alternately, the observers may chat with the players. Private information (i.e., game control information) could be exchanged between clients and the gaming facility 408 directly, rather than via an IRC channel.

CLAIMS:

18. A game program stored on processing device readable medium for execution by a processing device with an associated display to perform a game, comprising:

a first group of game instructions for manipulating a first playing object having at least one attribute, said first playing object being identifiably associated with a user, said first playing object having a look and feel on said display corresponding to said at least one attribute of said first playing object; and

a second group of mapping instructions for mapping attributes of a second input playing object having at least one attribute to attributes of said first playing object, said second playing object being identifiably associated with said user, said second playing object having a look and feel on said display corresponding to said at least one attribute of said second playing object, wherein said mapping function maintains a substantially similar overall value of attributes between said first and second playing objects.

20. The program of claim 18 wherein said second group of instructions includes instructions for translating generic attributes into game specific attributes.

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L18: Entry 2 of 3

File: JPAB

Oct 31, 2002

PUB-NO: JP02002320276A
DOCUMENT-IDENTIFIER: JP 2002320276 A
TITLE: MOBILE COMMUNITY COMMUNICATOR

PUBN-DATE: October 31, 2002

INVENTOR-INFORMATION:

NAME

COUNTRY

PEARSON, ANTHONY

INT-CL (IPC): H04 Q 7/38; H04 M 1/00

ABSTRACT:

PROBLEM TO BE SOLVED: To enable individuals to communicate with each other to discuss predetermined topics of interest (e.g. health and fitness, weather, politics, science, etc.).

SOLUTION: A mobile communicator (200) includes a full-duplex transceiver (202) which is capable of transmitting/receiving signals on one or more channels each corresponding to a predefined generic topic of interest. The communicator (200) further includes a channel selector (204) operatively coupled to the transceiver select specified one of the channels of the transceiver and a corresponding discussion topic. A user selects a channel, and then, may participate in a discussion in which the topic or subject matter corresponds to the selected channel.

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